Amendments to the Drawings:

The attached sheets of replacement drawings include changes to FIG. 1. The attached sheet for FIG. 1 replaces the original sheet and is corrected to show the elements of claim 18.

Attachment: Replacement Sheet

REMARKS

Applicants respectfully traverse and request reconsideration.

The Abstract has been objected to as exceeding the maximum of 150 words. The Abstract has been amended accordingly.

The status of the information regarding the co-pending applications listed in the specification, page 1, has been updated.

The drawings stand objected to as failing to show the elements in claim 18. FIG. 1 has been amended accordingly.

Claims 18, 20 and 21 are objected to due to informalities. The typographical errors have been corrected.

Claims 21 and 23 stand rejected under 35 U.S.C. §112, 2nd paragraph, as allegedly being indefinite. Applicants have corrected the typographical errors and as such, the rejections are respectfully requested to be withdrawn.

Claims 18-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Iachetta, Kelley and Heil. The Iachetta reference is directed to a data processing system wherein a data processing device includes at least one fast data processing device and at least one slow data processing device. The processing system is operable in a plurality of modes. For example, the office action cites FIG. 4 and combined structures 640 and 710 as allegedly teaching the claimed system controller and arbiter. However, Applicants respectfully submit that this characterization does not take into account the actual claim language in claim 18. For example, claim 18 requires that the system controller includes the high speed bus arbiter along with multiple memory channel controllers and the input/output controller as set forth in the claim is coupled to the high-speed bus arbiter and has a low-speed bus arbiter and the low-speed bus arbiter supports a slower bus rate than the high-speed bus arbiter. The IO controller alleged in the office action in Iachetta is structures 810 and 910 in FIG. 4 thereof. However, as shown in FIG. 4, the arbiter 910 is not coupled to the PCI to PCI bus bridge 810 as alleged in the

office action. In fact, they are separated by the bus 860. Moreover, the arbiter 910 is actually coupled to two slow devices 606 and 940 and arbitrate requests of these two slow devices over the slower PCI bus 860. As such, the claimed IO controller is not taught in the cited reference and as such, the claims are in condition for allowance. In addition, the office action alleges that "The control means for this communication is the claimed memory channel controller." However, there is no structure identified in the cited portion that allegedly corresponds to this claim language and as such, the office action fails to properly reject the claims. As such, the claim is in condition for allowance for this reason also.

In addition, the input/output controller as claimed is coupled to the high-speed bus arbiter. This would require that the arbiter 710 as alleged in the office action as being the high-speed bus arbiter as coupled to the IO controller which is said to be 810. However, this arbiter is not coupled to the PCI bus bridge 810 in any manner and instead is isolated from the bus bridge through the devices 690 and 700. Accordingly, the claim is in condition for allowance for this reason also. As such, the combination with the other references cannot render the claimed invention obvious. Accordingly, the claim is in condition for allowance.

Claims 19 and 20 also add additional novel and non-obvious subject matter.

Claim 22 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Iachetta and Kelley. Applicants respectfully reassert the remarks made above with respect to Iachetta and as such, this claim is also in condition for allowance.

As to claim 23, this claim has not been rejected and as such, Applicants believe that this claim has been allowed. Applicants respectfully request confirmation of the same.

Accordingly, Applicants respectfully submit that the claims are now in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

By:

Respectfully submitted,

Dated: March 23, 2005

Christopher J Reckame

Reg. No. 34,414

Vedder, Price, Kaufman & Kammholz, P.C. 222 North LaSalle Chicago, Illinois 60601 312/609-7500 312/609-5005 Facsimile